

5 WHAT IS CLAIMED IS:

- Sub B1
cont.
1. A stable, uniform, and alkali metal free aqueous dispersion consisting essentially of a dispersion in water of component (A), an ethylene-methacrylic acid copolymer containing 15-35 wt% methacrylic acid, and component (B), ammonia in an amount required for neutralizing 110-150% of the carboxyl groups of component (A).
2. The aqueous dispersion of claim 1 wherein the ethylene-methacrylic acid contains 18-30 wt% methacrylic acid.
3. The aqueous dispersion of claim 1 wherein the ethylene-methacrylic acid contains 15-25 wt% methacrylic acid.
4. The aqueous dispersion of claims 1, 2, or 3 wherein the ammonia is present in an amount sufficient to neutralize 120-140% of the carboxyl groups.
- Sub A1
5. The aqueous dispersion of claim 1 wherein the ethylene-methacrylic acid copolymer comprises 5-50 wt% of the dispersion and preferably has a melt flow rate of 50-2000 grams/10 minutes at 190°C/2160 gram load.
6. The aqueous dispersion of claim 3 wherein the ethylene-methacrylic acid copolymer comprises 5-50 wt% of the dispersion and preferably has a melt flow rate of 50-2000 grams/10 minutes at 190°C/2160 gram load.
- Sub B1
cont.
7. The aqueous dispersion of claim 4 wherein the ethylene-methacrylic acid copolymer has a melt flow rate of 60-1500 grams/10 minutes at 190°C/2160 gram load.
8. The aqueous dispersion of claim 5 wherein the ethylene-methacrylic acid copolymer has a melt flow rate of 60-1500 grams/10 minutes at 190°C/2160 gram load.
9. A coated substrate obtained by applying the aqueous dispersion of claim 1, 2 or 3 to the substrate for coating, then drying to form a coated substrate.
10. The coated substrate of claim 9 wherein the substrate is a film.

- 5 *Sub B1*
cont.
11. A process for making a stable, uniform, and alkali metal free aqueous dispersion of ethylene-methacrylic acid consisting essentially of mixing an ethylene-methacrylic acid copolymer containing 15-35 wt% methacrylic acid in water in the presence of sufficient ammonia to neutralize 110 to 150% of the carboxylic acid groups in the ethylene-methacrylic acid copolymer for a sufficient time to uniformly disperse the ethylene-methacrylic acid copolymer in the water.
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12. The process of claim 11 wherein the mixing is carried out at a temperature of about 90 to about 150°C for about 10 minutes to about 2 hours.